

*A cartel of mobile phone companies controls innovation on our wireless networks. It's time for government to step in.*

Let's say you're an entrepreneur who has an idea to build a wireless fob that finds your keys even if you left them in Virginia or Barcelona. Or say you want to design a refrigerator that transmits a signal to Safeway, instructing it to deliver a gallon of milk every time you're running low. To enter the market you will have to turn to one of the four mobile phone carriers that today exercise an oligopoly over wireless device communications: Verizon Wireless, AT&T, Sprint and T-Mobile.

Good luck. Get ready for an endless set of hurdles, including lengthy trials, revenue sharing and demands to cripple or modify features, without any guarantee of final approval. All that before your fob or fridge can transmit a tiny signal. In practice, many innovative devices never reach the market. The Big Four tend to approve only established partners whose devices fit their business plans, which is why we have yet to see all those wireless devices that were supposed to be in our future.

The firms already control what phones or devices reach Americans; 95% of cell phones are sold by the wireless carriers themselves. They strictly control phone design, blocking features that might threaten their revenue, like timers that keep track of how many minutes you've used each month. The carriers have also crippled or blocked alternative means of connecting wirelessly, like Bluetooth and Wi-Fi, because they want you to burn up minutes on their networks and charge extra fees.

The good news is that the federal government will soon have a chance to change all that and throw open America's airwaves to innovation and entrepreneurship. It will come in the form of an auction, within the next year, of the few remaining pieces of a precious national resource—licenses to the nation's wireless spectrum. This particular chunk of spectrum is becoming available because TV stations must stop using it to broadcast old-fashioned analog television by February 2009.

That's why this year's auction is so important. The Federal Communications Commission will soon deliver an initial set of rules to govern the spectrum auction. What's needed to spur innovation is a simple requirement: that any winner of the auction respect a rule that gives consumers the right to attach any safe device (meaning it does no harm) to the wireless network that uses that spectrum. It's called the Cellular Carterfone rule, after a 1968 decision by the FCC in a case brought by a company called Carter Electronics that wanted to attach a shortwave radio to AT&T network. That decision resulted in the creation of the standard phone jack. Applying the Carterfone rule to the next spectrum auction would ensure that our key fob designer need only look up standard technical specifications and then build and sell his device directly to the consumer. The tiny amounts of bandwidth the fob used would show up on the consumer's wireless bill.

The right to attach is a simple concept, and it has worked powerfully in other markets. For example, in the wired telephone world Carterfone rules are what made it possible to market answering machines, fax machines and the modems that sparked the Internet revolution.

Whenever today's wireless carriers hear "Carterfone", they are quick to make the irrelevant point that the Carterfone ruling was decided during a time when the phone company was a monopoly. Although, today, we have an oligopoly, controlled by four carriers instead of one monopoly, the same practices seen prior to 1968, which lead to the Carterfone ruling, have repeated themselves; this time by the wireless carriers – who provide a public mobile service – as they unfairly shut out competition.

Attachment rights can break open markets that might otherwise be controlled by dominant gatekeepers. Longshot companies like Ebay or YouTube might never have been born had they first needed the approval of a risk-averse company like AT&T. If you've invented a new toaster, you don't have to get approval from the electric company. Consumers decide how good your product is, not some gatekeeper.

But who has the political courage to push such ideas? To date, House Representatives Edward Markey (D-Mass.) and John Dingell (D-Mich.) have taken the lead in Congress by holding hearings on the issue. John McCain is the only presidential candidate so far to take a serious interest. Others should take notice. If America's reputation as the world's leading innovator is to be sustained, we need to get wireless policy right.